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•San Bernardino County Transportation Commission •San Bernardino County Transportation Authority
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Development Mitigation Nexus Study

Appendix K
of the
SANBAG Congestion Management Program
(Draft Report)

prepared by the
San Bernardino Associated Governments
(SANBAG)

September 19, 2005

Cities of: Adelanto, Barstow, Big Bear Lake, Chino, Chino Hills, Colton, Fontana, Grand Terrace, Hesperia, Highland, Loma Linda, Montclair Needles, Ontario, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Twentynine Palms, Upland, Victorville, Yucaipa
Towns of: Apple Valley, Yucca Valley County of San Bernardino

Preface to the September 19, 2005 SANBAG Nexus Study

This report presents the SANBAG Development Mitigation Nexus Study (Nexus Study) being considered for approval by the Plans and Programs Committee (PPC) on September 21, 2005. If approved by the PPC, the Nexus Study will be considered by the SANBAG Board of Directors on October 5. Changes may occur to the Nexus Study prior to Board approval. The Nexus Study will be incorporated into the SANBAG Congestion Management Program (CMP) as Appendix K. SANBAG serves as the Congestion Management Agency (CMA) responsible for implementing and maintaining the CMP.

The requirements of the SANBAG Development Mitigation Program will be included in Chapter 4 of the CMP ("Land Use/Transportation Analysis Program") and in Appendix J. Draft language has been prepared for the revision of Chapter 4 and will be considered for approval by the Plans and Programs Committee on October 19, along with biennial CMP update. Appendix J of the CMP (also in the review process) provides the specific requirements local jurisdictions must follow in implementing their development mitigation program for regional transportation facilities.

Background

The first draft Nexus Study was prepared in early 2004 at the direction of the SANBAG Board of Directors to support the development of Measure I 2010-2040. Measure I 2010-2040 was overwhelmingly approved by the voters of San Bernardino County on November 2, 2004. The development contribution requirements of Measure I 2010-2040 are included in Section VIII of the ordinance as follows:

> *"SECTION VIII. CONTRIBUTIONS FROM NEW DEVELOPMENT. No revenue generated from the tax shall be used to replace the fair share contributions required from new development. Each local jurisdiction identified in the Development Mitigation Program must adopt a development financing mechanism within 24 months of voter approval of the Measure 'I' that would:*
>
> *"1) Require all future development to pay its fair share for needed transportation facilities as a result of the development, pursuant to California Government Code 66000 et seq. and as determined by the Congestion Management Agency.*
>
> *"2) Comply with the Land Use/Transportation Analysis and Deficiency Plan provisions of the Congestion Management Program pursuant to California Government Code Section 65089.*
>
> *"The Congestion Management Agency shall require fair share mitigation for regional transportation facilities through a Congestion Management Program update to be approved within 12 months of voter approval of Measure 'I'."*

The requirements of the SANBAG Development Mitigation Program are included in Chapter 4 of the CMP ("Land Use/Transportation Analysis Program"). Appendix J of the CMP provides the

specific requirements local jurisdictions must follow in implementing their development mitigation program for regional transportation facilities.

The San Bernardino County CMP implements the Land Use/Transportation Analysis Program with two distinct approaches, depending on geographic location within the County. The first approach addresses the cities and associated spheres of influence in the San Bernardino Valley and Victor Valley, to which the Nexus Study and related development mitigation requirements apply. The second approach applies to all other areas of the County. These two approaches are summarized below:

1. For San Bernardino Valley and Victor Valley cities and sphere areas: local jurisdictions implement development mitigation programs that generate development contributions for regional transportation improvements equal to or greater than fair share contributions determined through the SANBAG Development Mitigation Nexus Study. Regional transportation facilities addressed by the Nexus Study include freeway interchanges, railroad grade separations, and regional arterial highways on the Nexus Study Network. Local jurisdiction development mitigation programs must comply with requirements established in Appendix J of the CMP. Each local jurisdiction must have an adopted and compliant development mitigation program designed to achieve the required contribution levels in place by November 2006.

2. For areas outside the San Bernardino Valley and Victor Valley cities and spheres: local jurisdictions must prepare Traffic Impact Analysis (TIA) reports for proposed development projects exceeding specified thresholds of trip generation. This is a continuation of a requirement established when the CMP was originally approved by the SANBAG Board in 1992. TIA reports must comply with requirements contained in Appendix C of the CMP.

At their discretion, jurisdictions outside the Valley and Victor Valley may adopt Approach 1, in coordination with and subject to the approval of SANBAG. However, an amendment to the Nexus Study will be required for this to occur.

Overview of the Nexus Study

The SANBAG Nexus Study shall be used as the basis for identifying fair share contributions from new development for regional transportation improvements (freeway interchanges, railroad grade separations, and regional arterial highways). The Nexus Study will be updated periodically in close coordination with local jurisdictions.

The Nexus Study identifies a Nexus Study Network, representing regional roadways in the urbanized areas of San Bernardino County. Roadway improvement projects must be located on this network for their costs to be included in the Nexus Study. In addition, projects must be included in the Nexus Study to receive SANBAG Measure I 2010-2040 Valley Interchange and Major Street Funds (31% of Valley subarea expenditure plan funds) and Victor Valley Major Local Highway Projects Funds (25% of Victor Valley subarea expenditure plan funds) or SANBAG allocations of state or federal transportation funds included in the Measure I 2010-2040 Expenditure Plan. A local jurisdiction may wish to identify other local or non-regional

improvements as part of its overall development mitigation program, but these are not included in the Nexus Study.

The Nexus Study identifies specific improvement projects on the Nexus Study Network and includes an estimate of costs for those projects. The cost estimates have been provided by local jurisdictions using the most recently available data. Costs may include planning, project development (including Project Study Reports, Project Reports, and environmental documents), design, construction, construction management, project management, right-of-way, and mitigation of impacts. Only those project phases for which costs are included in the Nexus Study are eligible for Measure I or other transportation funding allocated by SANBAG. The Nexus Study also includes an estimate of growth in dwelling units and employment expected over the planning period of the Nexus Study (2004 to 2030). These estimates have been prepared by local jurisdictions in conjunction with SANBAG and SCAG.

The methodology employed by the Nexus Study for calculating fair share development contributions was developed in early 2004 by the Nexus Study Task Force, consisting of staff representatives from local jurisdictions and from the private sector (principally the Building Industry Association and the National Association of Industrial and Office Properties). Individual meetings were also held with local jurisdictions and private entities, including representatives of the retail development industry. The implementation requirements contained in Chapter 4 and Appendix J of the CMP were developed in early 2005 by a working group of representatives from both local jurisdictions and the private sector. Chapter 4 and Appendix J were also reviewed by the SANBAG Comprehensive Transportation Plan Technical Advisory Committee (CTP TAC).

The Nexus Study provides an estimate of development contributions that represent a minimum fair share for regional transportation improvements for each local jurisdiction and for each jurisdiction's sphere area, based on the estimates of project costs and the growth data provided by those jurisdictions. San Bernardino County has provided the estimates of project costs and growth in dwelling units/employment for sphere areas, unless otherwise specified. The Nexus Study calculates fair share development contributions for each local jurisdiction and for the jurisdiction's sphere area.

The Nexus Study does not dictate how local jurisdictions must implement their development mitigation programs to achieve the development contribution levels specified in this report. Local jurisdictions have substantial flexibility in their program approach. In addition, the SANBAG Nexus Study does not dictate per-unit contribution levels (or development fees) by land use type. Each jurisdiction must develop its own schedule of fees or other per-unit mitigation levels that can be demonstrated to achieve the development contribution levels specified in this Nexus Study. Appendix J of the CMP also indicates that cities and the County may make arrangements to combine the required development contribution levels for each jurisdiction and its sphere and to develop a unified development mitigation program for the city and the sphere. For example, if a city is using a development impact fee (DIF) program to meet the SANBAG requirements, a common fee structure for the city and sphere could be established. The city and County would need to establish the appropriate legal agreements and administrative processes to manage such a joint program. The information in the SANBAG Nexus Study allows for either separate or joint

city/County programs. If a joint program is pursued, the city and County would add the development contribution levels for the both the city and sphere area.

The Regional Transportation System

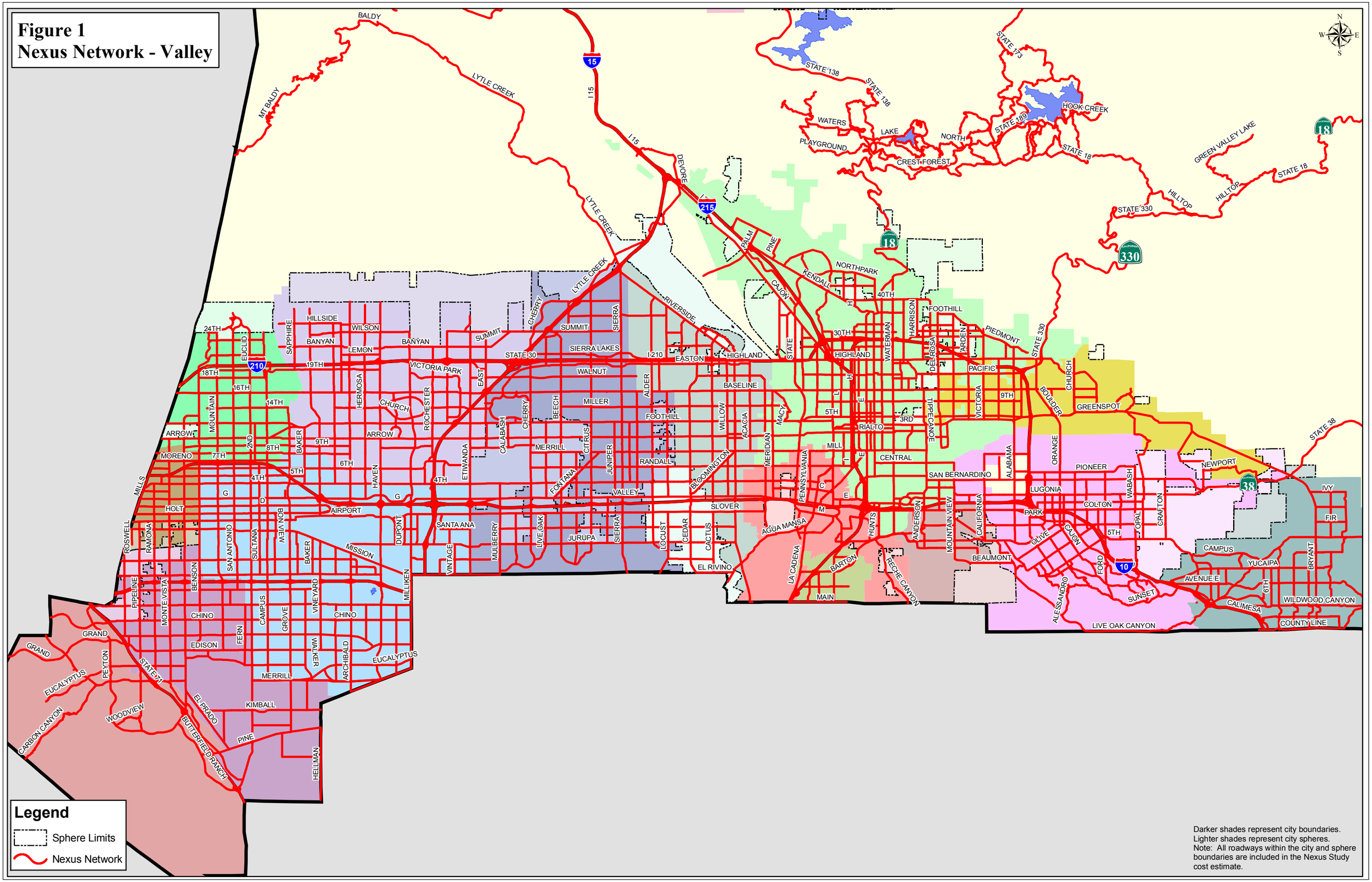
A "Nexus Study Network" has been defined as a basis for establishing the arterial roadways to be included in the Nexus Study. This network is regional in nature, but should not be confused with other systems, such as the existing Measure I Regional Arterial System in the Victor Valley. The system has been based on a generalized set of criteria involving roadway functional classification, propensity to carry inter-jurisdictional traffic, connection to the freeway system, etc. For example, every roadway that interchanges with a freeway is included on the Nexus Study Network. Figures 1 and 2 show the draft Nexus Study Network in the Valley and Victor Valley, respectively.

A list of interchanges has been compiled for inclusion in the Nexus Study. The list was originally based on the interchanges submitted by SANBAG and local jurisdictions for the 2004 Regional Transportation Plan (RTP) and then modified for the Nexus Study based on local jurisdiction input. The list was distributed to local jurisdictions for review and comment. A list of potential railroad grade crossing projects also has been compiled. Only the grade crossings on the Nexus Study Network are included in the analysis.

Forecast Growth by Jurisdiction

The calculation of fair share development contributions requires an estimate of projected growth for residential and non-residential development. The data set used as the starting point for projection of residential development (single and multi-family dwelling units) and non-residential development (retail and non-retail employment) was the 2030 local input provided as part of the growth forecasting process for the 2004 RTP. This iterative process, well-documented in the 2004 RTP of the Southern California Association of Governments (SCAG), generates an initial forecast for the entire Southern California region by jurisdiction, which is then given to local jurisdictions for review, comment, and possible modification. The "local input" 2030 data set was used for the Nexus Study because it was developed through the direct involvement of and review by each of the local jurisdictions. Each local jurisdiction signed off on its local input data in late 2002. These forecasts have been reviewed and updated by local jurisdictions in early and mid-2005. Three specific review and comment periods were provided to local jurisdictions in 2005 for both the growth forecasts and for the project lists. SANBAG staff was also available to meet with local jurisdictions individually and held such meetings with the majority of jurisdictions. The year 2004 was used as the base year for the analysis of growth forecasts. The 2004 dwelling unit totals by jurisdiction are based on California Department of Finance data. The 2004 employment data (retail and non-retail) was derived by adding one year of growth to the 2003 employment data reviewed by each of the local jurisdictions. The growth was estimated as $1/27^{th}$ of the projected growth between 2003 and 2030.

Figure 1
Nexus Network - Valley

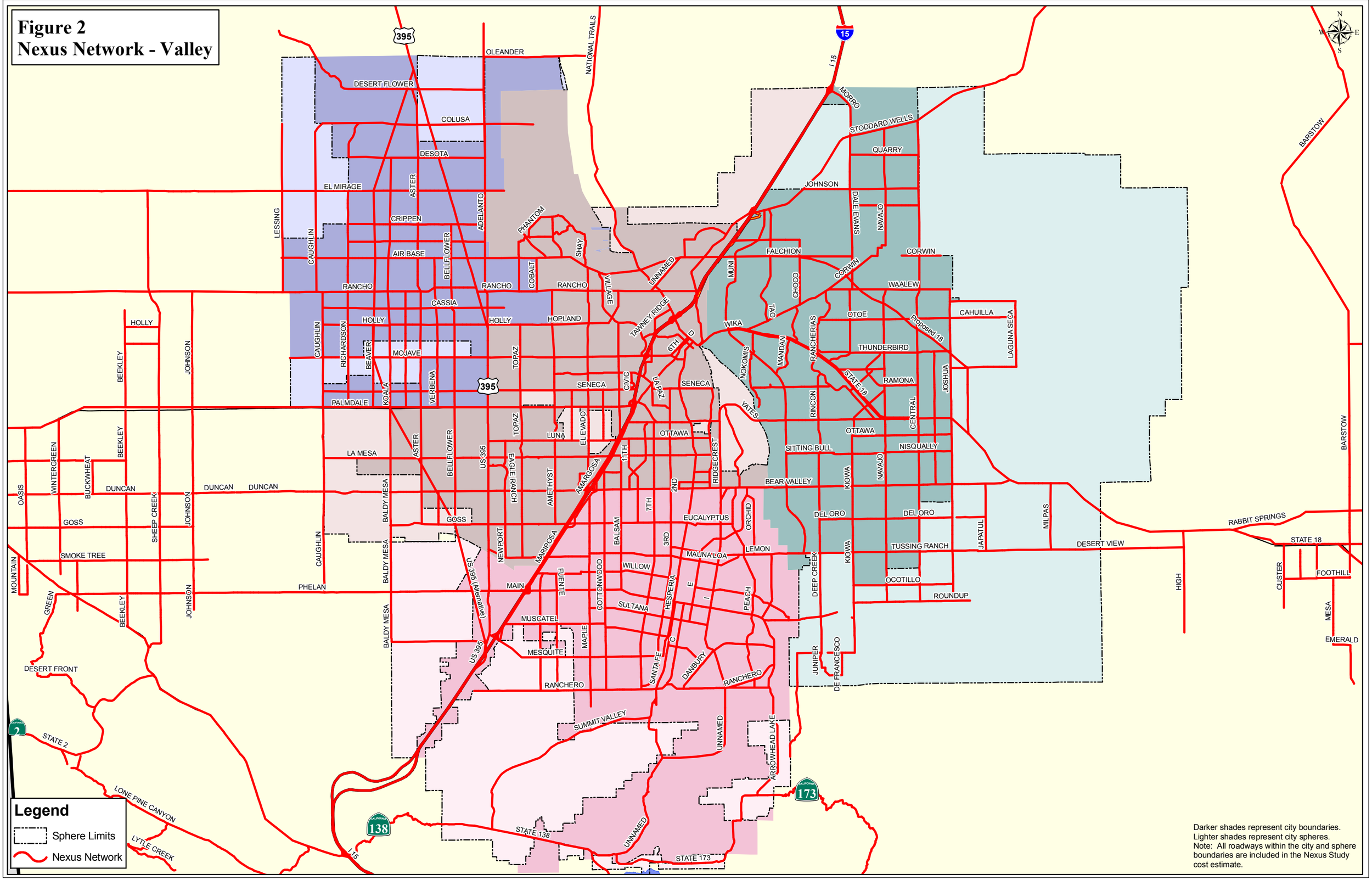


Legend

- Sphere Limits
- Nexus Network

Darker shades represent city boundaries.
Lighter shades represent city spheres.
Note: All roadways within the city and sphere boundaries are included in the Nexus Study cost estimate.

Figure 2
Nexus Network - Valley



Legend

- Sphere Limits
- Nexus Network

Darker shades represent city boundaries.
Lighter shades represent city spheres.
Note: All roadways within the city and sphere boundaries are included in the Nexus Study cost estimate.

Table 1 presents the 2004 and 2030 estimates of dwelling units and employment by jurisdiction. Table 2 presents the growth estimates for unincorporated areas within each city sphere area. The tables show the projected growth over the entire 26-year period. By way of comparison, 12,640 new residential dwelling units were permitted by local jurisdictions in San Bernardino County in 2003 (California Department of Finance Table I-6). The projected growth of about 290,000 dwelling units over the next 26 years equates to an average annual rate of about 10,700 units, approximately equivalent to the average number permitted annually in San Bernardino County for 2001 through 2003. The annual rate in the mid-90s was as low as half that rate. Thus, the rate of growth contained in the projections for the Nexus Study would appear consistent with historical trends as well as with regionally accepted projections.

Costs of Arterial, Interchange, and Railroad Grade Crossing Improvements

Cost estimates for many of the proposed improvements were available through jurisdiction submissions as part of the 2004 Regional Transportation Plan. This served as an initial foundation for the estimates of project cost. In other cases, the list was derived from projects contained in existing local jurisdiction development impact fee (DIF) programs. The initial list of projects and costs was again reviewed by each local jurisdiction in early and mid-2005. The cost estimates were generated as follows:

- **For arterials,** the local jurisdiction projects and cost estimates were accepted directly and entered into a database. These included only the arterial projects on the Nexus Study Network. Unless otherwise noted, the costs include right-of-way and construction costs. In some cases, bridges, traffic signals, and other cost items are specified separately. Where these items are not separately identified, the costs are assumed to be included in the overall cost estimate for widening of each facility. The existing number of lanes and the number of lanes after improvement are also identified. In general, curb lanes for roadways in areas yet to be developed are the responsibility of the development project fronting the roadway. The costs were reduced by the amount of federal earmarks for individual arterial projects from the SAFETEA-LU transportation bill, where specifically identified, based on the development mitigation principles adopted by the SANBAG Board.

- **For interchanges**, costs were estimated based on the following basic criteria:

    - Used the most recent Project Study Report (PSR) prepared, if available, or other updated costs from local jurisdictions. If necessary, these costs were updated to 2004. In some cases, PSR cost estimates for one interchange were used to estimate costs for other interchanges where the improvement needs were expected to be similar. For example, the Mountain View/I-10 interchange was viewed to have improvement costs of the same scale as the Tippecanoe/I-10 interchange. The interchange costs were reduced by the amount of federal earmarks, where specifically identified. The interchange cost tables show the costs both without and with the reduction from the earmark.

Table 1. Summary of Growth Data for Cities

Jurisdiction	Single Family 2030	Single Family 2004	Multi-Family 2030	Multi-Family 2004	Retail Empl. 2030	Retail Empl. 2004	Non-Retail Empl. 2030	Non-Retail Empl. 2004	Trips 2030 in PCEs	Trips 2004 in PCEs	Ratio of Trip Growth to 2030 Trips
Adelanto	25,346	3,866	6,354	1,462	886	375	6,448	2,775	163,322	30,852	81%
Apple Valley	25,695	15,870	9,387	4,170	5,136	3,099	19,887	12,207	225,189	132,841	41%
Chino	18,179	13,600	13,665	4,339	28,718	18,133	62,857	37,746	434,333	267,321	38%
Chino Hills	20,560	18,949	4,862	2,931	1,163	933	5,823	4,222	135,541	116,978	14%
Colton	11,979	9,228	13,959	5,541	13,492	7,176	35,003	19,038	254,720	143,774	44%
Fontana	44,107	31,252	11,840	7,741	15,218	8,584	57,230	41,071	450,635	301,750	33%
Grand Terrace	3,563	2,896	2,282	1,345	1,564	575	4,403	1,922	43,104	25,891	40%
Hesperia	43,008	17,808	9,690	3,610	11,008	4,743	37,974	14,833	380,287	156,187	59%
Highland	16,739	13,005	2,674	2,508	8,591	1,377	11,336	5,919	170,865	91,564	46%
Loma Linda	6,924	3,898	5,298	4,003	7,189	4,637	18,068	11,655	130,234	83,194	36%
Montclair	8,000	6,095	2,800	2,373	12,414	10,347	16,536	13,065	162,971	132,122	19%
Ontario	42,132	29,726	26,897	14,442	30,063	10,983	101,403	65,282	662,379	368,391	44%
Rancho Cucamonga	36,443	34,856	22,519	12,630	14,108	6,552	79,342	51,751	471,948	336,520	29%
Redlands	19,252	16,525	9,862	7,902	9,345	6,369	30,524	20,803	240,286	184,755	23%
Rialto	25,400	18,438	6,590	6,706	7,181	4,390	27,758	17,403	239,949	170,979	29%
San Bernardino	36,867	35,957	23,077	20,844	25,426	9,498	99,051	69,188	585,946	416,016	29%
Upland	19,866	16,091	14,134	10,751	11,552	2,136	37,792	28,505	284,256	172,228	39%
Victorville	34,419	17,886	12,702	8,826	17,500	8,019	61,500	29,011	428,023	218,150	49%
Yucaipa	16,450	11,273	7,398	5,757	2,981	1,806	9,593	6,701	142,346	98,366	31%

Table 2. Summary of Growth Data for Spheres of Influence

JURISDICTION	Single Family 2030	Single Family 2004	Multi-Family 2030	Multi-Family 2004	Retail Empl. 2030	Retail Empl. 2004	Non-Retail Empl. 2030	Non-Retail Empl. 2004	Trips 2030 in PCEs	Trips 2004 in PCEs	Ratio of Trip Growth to 2030 Trips
Adelanto Sphere	145	62	22	26	18	2	114	18	1,183	438	63%
Apple Valley Sphere	2,650	1,539	305	325	120	58	1,030	709	17,056	10,184	40%
Chino Sphere	1,837	1,243	333	357	1,078	626	1,200	694	20,433	12,940	37%
Colton Sphere	983	674	156	175	51	22	1,011	518	7,694	4,833	37%
Fontana Sphere	10,992	7,383	2,351	2,519	6,317	3,659	11,598	6,687	129,283	81,370	37%
Hesperia Sphere	3,019	1,667	349	372	134	99	648	456	18,692	10,928	42%
Loma Linda Sphere	1,173	245	97	122	27	9	889	417	8,232	2,279	72%
Montclair Sphere	1,949	1,289	779	830	1,155	670	1,744	1,010	24,536	15,554	37%
Redlands Sphere	3,910	2,307	658	735	64	30	8,183	6,253	35,526	22,909	36%
Rialto Sphere	9,489	5,805	804	876	411	237	7,284	4,579	64,927	39,968	38%
San Bernardino Sphere	8,662	6,838	2,033	2,142	304	229	7,171	5,018	65,075	50,016	23%
Victorville Sphere	4,356	3,748	352	392	110	66	1,005	716	26,091	21,459	18%
Yucaipa Sphere	204	123	36	40	1	0	275	165	1,621	980	40%
SBCo Non-Sphere	3,635	1,102	87	121	17	12	2,738	1,998	23,167	8,760	62%

- Where PSRs or updated costs from local jurisdictions were not available, an assessment was made of reconstruction needs for each interchange. Interchanges were classified as to whether the arterial crossed over or under the freeway, whether the bridge would need to be replaced or kept (for underpasses), whether there was involvement with a rail line, and whether right-of-way acquisition would likely be limited or extensive. The following general rules were then applied to assign costs for interchange construction and right-of-way acquisition. The rules were based on recent construction and PSR experience and on input from Caltrans and SANBAG's general engineering consultant:

    - New interchange (arterial crossing over freeway): $25 million
    - New interchange with railroad involvement - $30 million
    - Modified underpass, structure replaced - $40 million
    - Modified underpass, keeping structure, limited ROW, and no unusual geometry - $18 million
    - Modified underpass, keeping structure, extensive ROW - $23 million
    - Modified overpass, no railroad involvement, limited ROW - $21 million
    - Modified overpass, railroad involvement, limited ROW - $25 million
    - Modified overpass, no railroad involvement, extensive ROW - $25 million
    - Modified overpass, railroad involvement, extensive ROW - $30 million
- It should be understood that these planning-level estimates are based on the best available information. Cost estimates may vary from the above general rules depending on other circumstances in the vicinity of each interchange. Local jurisdictions and SANBAG may provide on-going updates to cost estimates as PSRs become available and as right-of-way needs become more defined.

- **For railroad grade crossing projects**, costs were taken directly from local jurisdiction estimates submitted for the 2004 RTP, with updates provided by local jurisdictions in early and mid-2005. Again, costs were reduced based on federal earmarks, where specifically identified.

Table 3 lists the interchange improvements included in the Nexus Study. In this table, "K" means to keep the structure, "R" means replace. A "C" means complex geometry is likely. Railroad involvement is a Yes or No. Right-of-way is Limited or Extensive.

The list of railroad grade crossing improvements is presented in a later section. The arterial project list is provided in Attachment 1 of this report.

Table 3. Interchange Descriptions and Costs (K = keep structure, R = replace structure; RR involvement = Yes/No; L = limited ROW requirements; E = Extensive ROW requirements)

Description	2004 Cost ($1,000)	Existing Structure (Art. Over/Under)	Struc	RR Inv.	ROW
VALLEY INTERCHANGES (Listed generally west to east)					
In Chino on SR-60 at Mountain Av – Interchange Improvements	$18,000	Underpass	K	N	L
In Chino on SR-60 at Central Av – Interchange Improvements	$21,000	Overpass		N	L
In Chino on SR-60 at Ramona Ave. – Interchange Improvements	$21,000	Overpass		N	L
In Montclair on I-10 at Monte Vista – Interchange Improvements	$20,000	Underpass	K	N	E
In Ontario on SR-60 at Grove Avenue, Interchange Improvements	$35,000	Underpass	R	N	E
In Ontario on SR-60 at Vineyard Avenue, Interchange Improvements	$35,000	Underpass	R	N	E
In Ontario on SR-60 at Archibald Avenue, Widen Ramps	$5,000	Underpass	K	N	L
In Ontario on SR-60 at Euclid Avenue, Widen Ramps	$5,000	Underpass	K	N	L
In Ontario on I-10 at 4th St/Grove Av - Interchange Improvements	$54,500	Underpass	R	N	E
In Ontario on I-10 at Euclid Ave. – Widen EB and WB Ramps	$6,000		N	N	L
In Rancho Cucamonga on I-15 near 6th St/Arrow Route - New Interchange	$29,000	Underpass	K	N	L
In Rancho Cucamonga on I-15 at Baseline – Interchange Improvements	$18,000	Underpass	K	N	L
In Fontana on I-15 at Duncan Canyon Rd - New Interchange	$18,000			N	
In Fontana on I-15 at Sierra Av – Interchange Improvements	$10,000	Underpass	R	N	E
In Fontana on I-10 at Alder Av – New Interchange	$27,000			Y	E
In Fontana on I-10 at Citrus Av – Interchange Improvements (includes half of Cypress OC)	$38,000	Overpass		Y	L
In Fontana on I-10 at Cherry Av – Interchange Improvements (includes half of Mulberry OC)	$35,000	Overpass		Y	E
In Fontana on I-10 at Beech Av – New Interchange (includes half of Poplar OC)	$33,000			Y	E
In Highland on SR-30 (SR-210) at 5th Street - Interchange Improvements	$14,000	Underpass	K	N	L
In Highland on SR-30 (SR-210) at Base Line - Interchange Improvements	$14,000	Underpass	K	N	L
In Rialto on I-I0 at Riverside Av – Interchange Improvements	$40,000	Overpass	R	Y	L
In Colton on I-10 at Mount Vernon—Interchange Improvements	$25,000	Overpass		Y	L
Near Colton on I-10 at Pepper Av – Interchange Improvements	$27,000	Overpass		Y	E

Description	2004 Cost ($1,000)	Existing Structure (Art. Over/Under)	Struc	RR Inv.	ROW
Near Bloomington on I-10 at Cedar Av - Interchange Improvements	$27,000	Overpass		Y	E
In San Bernardino on I-215 at Palm Av - Widen Ramps	$8,000	Underpass	K	N	L
In San Bernardino on I-215 at Pepper-Linden Av - New Interchange	$40,000			N	E
In San Bernardino on I-215 at University Pkwy - Interchange Improvements	$23,000	Underpass	K	N	E
In San Bernardino on SR-30 (SR-210) at Del Rosa Av – Interchange Improvements	$28,800	Underpass	K	N	L
In San Bernardino on SR-30 (SR-210) at Waterman Av - Interchange Improvements	$40,000	Overpass		N	E
In Redlands on I-10 at University Ave - Interchange Improvements	$4,000	Underpass	K	N	L
In Redlands on I-10 at Wabash Av – Interchange Improvements	$21,000	Overpass		N	L
In Loma Linda on I-10 at Mountain View Av - Interchange Improvements	$40,000	Underpass	K	N	E
In Redlands on I-10 at Alabama St – Interchange Improvements	$21,000	Overpass		N	L
In Redlands on I-10 at California St – Interchange Improvements	$35,000	Underpass	K	Y	E
In Loma Linda and San Bernardino on I-10 at Tippecanoe - Interchange Reconfiguration	$40,000	Underpass	C	N	E
In Yucaipa on I-10 at Oak Glen Road / Live Oak Canyon Road – I/C Improvements	$11,000	Overpass		N	L
In Yucaipa on I-10 at Wildwood Canyon - New Interchange	$25,000			N	E
VICTOR VALLEY INTERCHANGES					
In Hesperia on I-15 at Ranchero Rd - New Interchange	$25,000			N	E
In Hesperia on I-15 at Joshua - Interchange Improvements	$1,000	Overpass	NA	N	L
In Victorville on I-15 at Mojave St – New interchange	$40,000			N	E
In Victorville on I-15 at Bear Valley Rd—Interchange Improvements	$20,000	Overpass	K	N	L
In Victorville on I-15 at La Mesa Rd/Nisqualli Rd - New interchange	$51,000			N	E
In Victorville on I-15 at Eucalyptus – New interchange	$40,000			N	E
In Victorville/Apple Valley on I-15 at East/West High Desert Corridor - New I/C	$60,000	Overpass		N	E

Methodology for Estimating Proportion of Costs Attributable to New Development

State law requires that new development not be charged to correct existing transportation deficiencies. An analysis was therefore conducted to estimate the cost of the identified improvements attributable to new development. It is important to note that there are different methodologies that could be used to estimate the proportion of cost attributable to new development. One approach would determine whether new development would require the widening or expansion of an existing facility to meet predetermined performance criteria (e.g. a specified "level of service"). New development could be deemed to be responsible for 100 percent of the cost of improving the facility to a level that would achieve the performance criteria, since that improvement would not be necessary if the development did not occur.

Another approach is to allocate new development's fair share based on the proportion of total traffic that the new growth represents. This would be calculated as a ratio of the estimated growth in traffic (between existing and future years) to the total traffic in the future year. The second approach is more conservative, as new development is held to be responsible for a share of the cost of facility expansion, not 100 percent of the cost. Even though the SANBAG Nexus Study takes the second approach, local jurisdictions may follow the first approach or any alternate approach that is consistent with California law and that achieves the minimum fair share development contribution levels specified in this Nexus Study. The methodology for arterials, interchanges, and railroad crossings involved the following steps:

Methodology for Arterial Project Fair Share:

- Calculate trip growth (2004 to 2030) for each jurisdiction, based on growth data. Trips for each jurisdiction were estimated by applying vehicle trip generation rates per dwelling unit (single and multiple family) and per employee (retail and non-retail) to the previously described 2004 and 2030 dwelling unit and employment data. These are actually defined as "trip ends." The number of trips would be calculated as the number of trip ends divided by two. The trip generation rates are:
  - Single family dwelling unit – 9.57 vehicle trip ends (in and out) per day (based on the Institute of Transportation Engineers report *Trip Generation)*
  - Multi-family dwelling unit – 6.63 vehicle trip ends per day (based on the ITE report *Trip Generation)*
  - Retail – 19.5 vehicle trip ends per employee per day (based on per-employee rates used by SCAG)
  - Non-retail - 1.85 vehicle trip ends per employee per day (based on per-employee rates used by SCAG)
- Calculate total trip ends in passenger car equivalents (PCEs) for each jurisdiction and sphere area.
- Growth's fair share = ratio of growth in trip ends (2004 to 2030) to total 2030 trip ends. These percentages (for each jurisdiction and sphere) were previously illustrated in the last column of Tables 1 and 2. (Note: for the "Donut Hole" in unincorporated San Bernardino County, the ratio of trip growth to 2030 trips was based on trips taken from a January 2005 Traffic Impact Analysis entitled "County of San Bernardino Donut Hole Projects Cumulative Traffic Impact Analysis." The dwelling unit and employment data in the Donut Hole were not adequately up-to-date for calculating this percentage.)

- Multiply fair share by Nexus Study Network arterial improvement cost for each jurisdiction

There is no allocation of arterial project costs to jurisdictions outside the jurisdiction in which the project is located. Each jurisdiction is responsible for the arterial improvements within its own jurisdiction.

Methodology for Interchange Project Fair Share:

- Define "traffic sheds" for each interchange. A traffic shed represents the geographic area around the interchange from which most of the traffic using that interchange is likely to be drawn. In general, traffic will be drawn to an interchange following the roadways that cross the freeway. However, it is not expected that traffic within each traffic shed will exclusively use the interchange with which the traffic shed is associated. Where an arterial crosses the freeway at a perpendicular angle, the traffic shed was extended half way to the adjacent interchanges. Different configurations were required for traffic sheds in which the arterial was not perpendicular to the freeway. Further, the traffic sheds were generally extended laterally (i.e. perpendicular to the freeway) no farther than half way to the next parallel freeway. Traffic sheds used in the analysis are shown in Figures 3 and 4 for the Valley and Victor Valley, respectively. Several "select link" runs were conducted using the RIVSAN CTP model to verify the logic behind the definition of the traffic sheds. The traffic shed approach was accepted by the Nexus Study Task Force and CTP TAC through reviews of the methodology in 2004.

- Calculate the projected growth in trips (2004 to 2030) by jurisdiction within the traffic shed for each interchange. This analysis was conducted using SANBAG's GIS system, overlaying the traffic sheds on the traffic analysis zones (TAZs) containing the socio-economic data. Trip generation rates used in this analysis are discussed in a subsequent section.

- The fair share attributed to new development = ratio of traffic growth (2030 minus 2004) to total 2030 traffic. It should be noted that this approach will provide a conservatively low estimate of the fair share attributable to growth, compared to the alternate approach discussed earlier for arterials (i.e. assign 100 percent of the cost of the improvement to new development, if it were determined that the improvement would not be needed if no more growth were to occur). For new interchanges, a minimum fair share percentage of 50 percent was applied.

- Allocate the fair share cost among jurisdictions based on the calculations of trip growth within the traffic shed, by jurisdiction. For unincorporated areas, the fair share cost was estimated for each city sphere area.

- Multiply fair share by interchange improvement cost

Figure 3
Traffic Sheds
Valley

I-15/Sierra
I-15/Duncan Canyon
I-15/Baseline
I-15/6th
I-15/Jurupa
I-215/Palm
I-215/Linden
I-215/University
SR-30/Waterman
SR-30/Del Rosa
SR-30/Central
SR-30/Baseline
SR-30/5th
I10/Monte Vista
I-10/4th
I-10/Cherry
I-10/Beech
I-10/Citrus
I-10/Alder
I-10/Cedar
I-10/Pepper
I-10/Riverside
I-10/Mt. Vernon
I-10/California
I-10/Alabama
I-10/Tippecanoe
I-10/University
I-10/Wabash
I-10/Live Oak Canyon
I-10/Wildwood Canyon
SR-60/Ramona
SR-60/Euclid
SR-60/Grove
SR-60/Archibald
SR-60/Central
SR-60/Vineyard

UPLAND
RANCHO CUCAMONGA
FONTANA
RIALTO
SAN BERNARDINO
HIGHLAND
MONTCLAIR
ONTARIO
CHINO
CHINO HILLS
COLTON
LOMA LINDA
REDLANDS
YUCAIPA
GRAND TERRACE

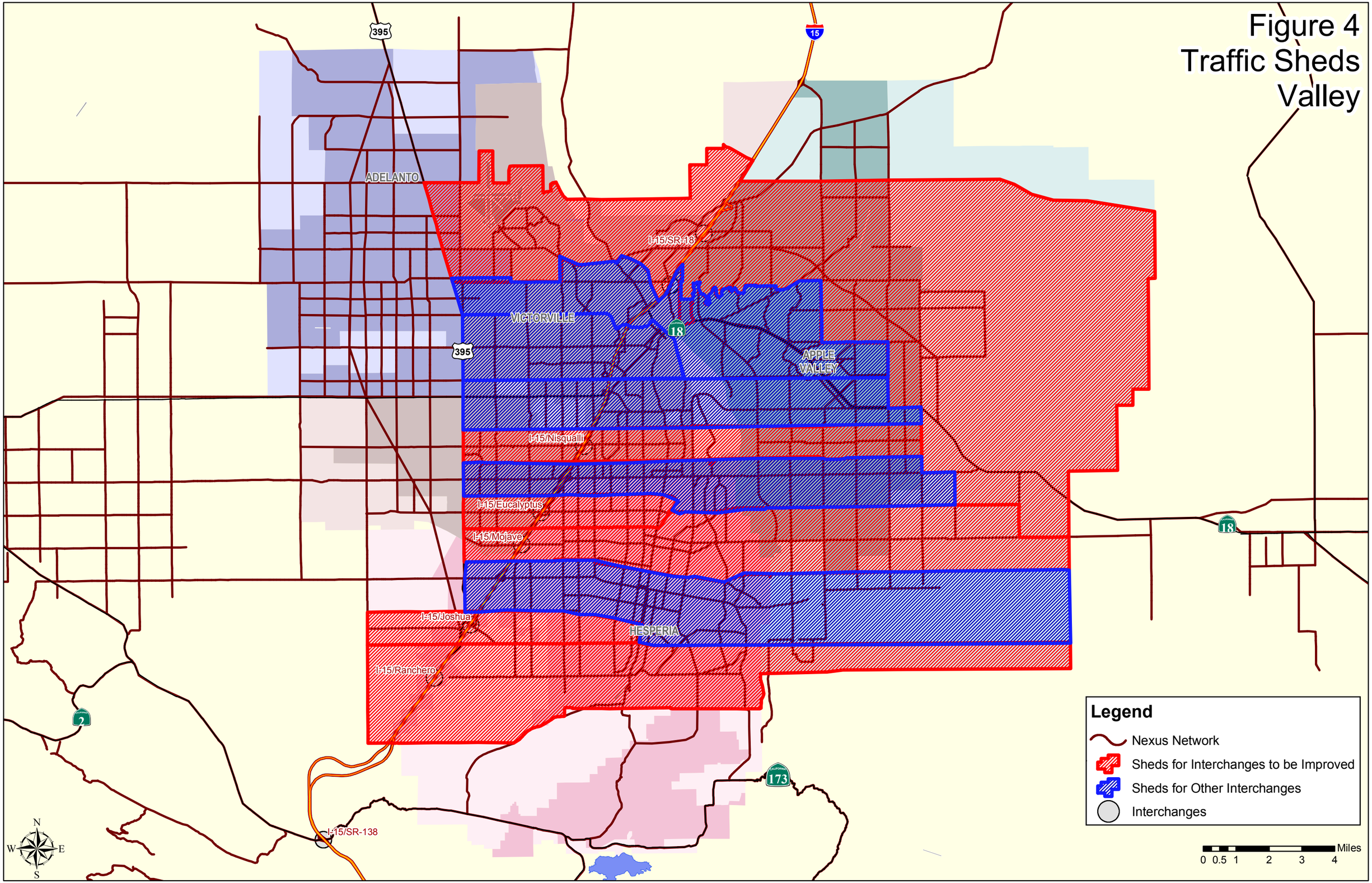
Legend

- Nexus Network
- Sheds for Interchanges to be Improved
- Sheds for Other Interchanges
- Interchanges

Miles
0 1 2 4 6 8

N
W E
S

Figure 4
Traffic Sheds
Valley



- Calculate jurisdiction-level total fair share interchange costs. Table 4 shows the calculations of percent responsibility by jurisdiction and jurisdiction sphere area. Table 5 shows the fair share dollar allocation for jurisdictions and spheres. For example, the fair share allocation of interchange cost could be allocated as follows:
  - Interchange cost = $20 million
  - Ratio of growth (2030 trips within the traffic shed minus 2004 trips) to 2030 trips = 25%
  - Fair share cost = $5 million ($20 million X 25%)
  - 80% of "traffic shed" trips from Jurisdiction X = $4 million
  - 20% of trips from Jurisdiction Y = $1 million

Methodology for Railroad Grade Crossing Project Fair Share:

- The ratio of trip growth to 2030 trips by jurisdiction (same as for the arterial analysis) was applied to the railroad grade crossing project cost

- An assessment was made of the proportion of the growth in traffic delays attributable to train growth versus traffic growth. The fair share allocated to new development was reduced by the percentage of train growth. Growth in train volume was based on forecasts prepared for the Inland Empire Rail Mainline Study by Robert Leachman & Associates. Fair share costs are not assessed to new development for the proportion attributable to train growth.

- Only costs for railroad crossing projects on the Nexus Study network were included in the fair share calculation. Individual jurisdictions may include other projects in their own DIF programs. Table 6 lists the railroad grade separation projects on the Nexus Study Network, their costs, ratio of train growth to 2030 train volume, ratio of traffic growth to 2030 traffic volume (at a jurisdictional level), and fair share cost for the railroad grade crossing projects.

Estimated Development Contribution Levels by Jurisdiction and Sphere Area

Table 7 summarizes the jurisdiction-by-jurisdiction costs and fair share amounts for regional arterials, interchanges, and railroad grade crossing projects. Table 8 breaks down the fair share amounts by sphere area. Some of these costs are already accounted for in local DIF programs or other local development mitigation programs. Each jurisdiction is responsible for implementing a development mitigation program by November 2006 that is designed to achieve these fair share mitigation levels. Provisions for submission of these programs to SANBAG are contained in Appendix J of the CMP. Jurisdictions may develop such programs prior to November 2006. If such programs are found by SANBAG to be compliant with the Nexus Study and provisions of the CMP, the requirement for preparing CMP TIA reports will be waived.

Table 4. Estimate of Development's Fair Share Percentage of Interchange Costs, by Jurisdiction and Sphere

Fwy.	Interchange	Ratio of Growth to 2030 in Traffic Shed	Cost ($Mill)	Federal Earmarks	Chino	Chino Sphere	Montclair	Montclair Sphere	Upland	Upland Sphere	Ontario	Fontana	Fontan Sphere	Rancho	Rialto	Rialto Sphere	Colton	Colton Sphere	S. Bern.	S. Bern Sphere	L. Linda	L.Linda Sphere	Redlands	Donut Hole	Redlands Sphere	Highland	Yucaipa	Hesperia	Hesperia Sphere	Victorville	Victorville Sphere	Adelanto	A. Valley	A. Valley Sphere
60	Ramona	31.3%	$21		53.6%	16.7%	7.7%	22.0%																										
	Central	58.8%	$21		91.7%	0.9%	0.6%	6.7%																										
	Mountain	46.2%	$18		49.6%						50.4%																							
	Euclid	44.5%	$5		43.0%						57.0%																							
	Grove	48.3%	$35		1.2%						98.8%																							
	Vineyard	60.3%	$35		6.7%						93.3%																							
	Archibald	66.1%	$5								100.0%																							
I-10	Monte Vista	24.1%	$20				73.5%		2.2%	24.3%																								
	Grove/4th	17.1%	$54						13.7%		63.7%			22.6%																				
	Euclid	17.4%	$6						60.0%		40.0%																							
	Cherry	35.4%	$35									26.0%	74.0%																					
	Beech	50.0%	$33									48.0%	52.0%																					
	Citrus*	38.4%	$38	($2.4)								73.0%	27.0%																					
	Alder	50.0%	$27									45.3%	25.8%			28.8%																		
	Cedar	30.0%	$27									6.4%	5.9%		14.2%	73.5%																		
	Riverside	27.4%	$40	($2.0)											65.8%	7.9%	26.2%																	
	Pepper	34.0%	$27													1.8%	91.9%	2.2%	4.1%															
	Mt. Vernon	5.1%	$25														100.0%																	
	Tippecanoe	34.6%	$40																50.0%		50.0%													
	Mt. View	37.8%	$40																20.0%		70.0%	6.1%	3.9%											
	California	47.8%	$35																		37.9%	22.4%	14.6%	25.2%										
	Alabama	50.5%	$21																				34.9%	65.1%										
	University	17.9%	$4																				100.0%											
	Wabash	35.8%	$21																				12.5%		87.5%									
	Live Oak	37.0%	$11																				1.0%				99.0%							
	Wildwood	50.0%	$25																								100.0%							
I-15	6th/Arrow	50.0%	$29										10.1%	90.0%																				
	Baseline	50.0%	$18	($4.0)								33.4%		66.6%																				
	Duncan Cyn.	77.3%	$18									79.0%	21.0%																					
	Sierra	80.3%	$10									27.9%	1.4%		64.5%	6.1%																		
	Ranchero	57.5%	$25																									93.2%	5.9%					0.8%
	Joshua	58.7%	$1																									95.0%	5.0%					
	Mojave	55.4%	$40																									77.2%		7.9%			11.2%	3.8%
	Eucalyptus	57.4%	$40																									53.2%		46.8%				
	Bear Valley	31.3%	$20																									15.0%		53.0%			31.0%	1.0%
	La Mesa	50.0%	$51	($1.2)																										78.8%	1.6%		19.6%	
	E-W Corr.	63.7%	$60																											27.1%		18.0%	35.8%	19.1%
I-215	University	15.8%	$23													2.2%			43.0%	55.0%														
	Pep/Lind	50.0%	$40																100.0%															
	Palm	35.7%	$8																50.0%	50.0%														
210	Waterman	18.2%	$40																100.0%															
	Del Rosa	32.8%	$28																63.0%	9.0%						28.0%								
	Baseline	41.9%	$14																							100.0%								
	5th	44.1%	$14																5.2%				1.4%			93.4%								
Total			$1,146	($9.6)																														

*The Citrus Interchange includes 50% of the cost of the Cypress Overcrossing.
Therefore, the Cypress federal earmark was applied to the Citrus interchange.

Table 5. Estimate of Development's Fair Share of Interchange Costs, by Jurisdiction and Sphere

Fwy.	Interchange	Ratio of Growth to 2030 in Traffic Shed	Cost ($Mill)	Federal Earmarks	Chino	Chino Sphere	Montclair	Montclair Sphere	Upland	Upland Sphere	Ontario	Fontana	Fontana Sphere	Rancho	Rialto	Rialto Sphere	Colton	Colton Sphere	S. Bern.	S. Bern. Sphere	L. Linda	L. Linda Sphere	Redlands	Donut Hole	Redlands Sphere	Highland	Yucaipa	Hesperia	Hesperia Sphere	Victorville	Victorville Sphere	Adelanto	A. Valley	A. Valley Sphere	Sum of Fair Shares	Fair Share Req.
60	Ramona	31.3%	$21		$3.52	$1.10	$0.51	$1.45																											$6.57	$6.57
	Central	58.8%	$21		$11.32	$0.11	$0.07	$0.83																											$12.34	$12.35
	Mountain	46.2%	$18		$4.12						$4.19																								$8.32	$8.32
	Euclid	44.5%	$5		$0.96						$1.27																								$2.23	$2.23
	Grove	48.3%	$35		$0.20						$16.70																								$16.91	$16.91
	Vineyard	60.3%	$35		$1.41						$19.69																								$21.11	$21.11
	Archibald	66.1%	$5								$3.31																								$3.31	$3.31
I-10	Monte Vista	24.1%	$20				$3.54		$0.11	$1.17																									$4.82	$4.82
	Grove/4th	17.1%	$54						$1.27		$5.88			$2.09																					$9.23	$9.23
	Euclid	17.4%	$6						$0.63		$0.42																								$1.04	$1.04
	Cherry	35.4%	$35									$3.18	$9.04																						$12.21	$12.21
	Beech	50.0%	$33									$7.80	$8.45																						$16.25	$16.25
	Citrus*	38.4%	$38	($2.4)								$9.95	$3.93																						$13.88	$14.55
	Alder	50.0%	$27									$6.05	$3.44			$3.84																			$13.34	$13.35
	Cedar	30.0%	$27									$0.52	$0.48		$1.15	$5.95																			$8.10	$8.10
	Riverside	27.4%	$40	($2.0)											$6.85	$0.82	$2.73																		$10.40	$10.96
	Pepper	34.0%	$27													$0.16	$8.31	$0.20	$0.37																$9.04	$9.04
	Mt. Vernon	5.1%	$25														$1.28																		$1.28	$1.28
	Tippecanoe	34.6%	$40																$6.92		$6.92														$13.84	$13.84
	Mt. View	37.8%	$40																$3.02		$10.58	$0.92	$0.59												$15.12	$15.12
	California	47.8%	$35																		$6.34	$3.75	$2.44	$4.22											$16.75	$16.73
	Alabama	50.5%	$21																				$3.70	$6.90											$10.61	$10.61
	University	17.9%	$4																				$0.72												$0.72	$0.72
	Wabash	35.8%	$21																				$0.94		$6.58										$7.52	$7.52
	Live Oak	37.0%	$11																				$0.04				$4.03								$4.07	$4.07
	Wildwood	50.0%	$25																								$12.50								$12.50	$12.50
I-15	6th/Arrow	50.0%	$29										$1.46	$13.05																					$14.51	$14.50
	Baseline	50.0%	$18	($4.0)								$2.34		$4.66																					$7.00	$9.00
	Duncan Cyn.	77.3%	$18									$10.99	$2.92																						$13.91	$13.91
	Sierra	80.3%	$10									$2.24	$0.11		$5.18	$0.49																			$8.02	$8.03
	Ranchero	57.5%	$25																									$13.40	$0.72					$0.12	$14.23	$14.38
	Joshua	58.7%	$1																									$0.56	$0.03						$0.59	$0.59
	Mojave	55.4%	$40																									$17.11		$1.75			$2.48	$0.84	$22.18	$22.16
	Eucalyptus	57.4%	$40																									$12.21		$10.75					$22.96	$22.96
	Bear Valley	31.3%	$20																									$0.94		$3.32			$1.94	$0.06	$6.26	$6.26
	La Mesa	50.0%	$51	($1.2)																										$19.62	$0.40		$4.88		$24.90	$25.50
	E-W Corr.	63.7%	$60																											$10.36		$6.88	$13.68	$7.30	$38.22	$38.22
I-215	University	15.8%	$23													$0.08			$1.56	$2.00															$3.64	$3.63
	Pep/Lind	50.0%	$40													$0.00			$20.00	$0.00															$20.00	$20.00
	Palm	35.7%	$8																$1.43	$1.43															$2.86	$2.86
210	Waterman	18.2%	$40																$7.28																$7.28	$7.28
	Del Rosa	32.8%	$28																$5.79	$0.83						$2.57									$9.18	$9.18
	Baseline	41.9%	$14																							$5.87									$5.87	$5.87
	5th	44.1%	$14																$0.32				$0.09			$5.77									$6.17	$6.17
Total			$1,146	($9.6)	$21.54	$1.21	$4.12	$2.27	$2.00	$1.17	$51.46	$43.06	$29.84	$19.80	$13.18	$11.35	$12.31	$0.20	$46.69	$4.25	$23.84	$4.67	$8.52	$11.12	$6.58	$14.20	$16.53	$44.22	$0.75	$45.79	$0.40	$6.88	$22.99	$8.32		

Table 6. Railroad Grade Crossing Projects on Nexus Study Network

Description	2004CostEst ($1000s)	Federal Earmarks	Location	Ratio Train Growth to 2030	Ratio Trip Growth to 2030	Cost Alloc. to Devel. ($1000s)
Grade Separation at Olive St in Colton on the San Bernardino Line	$17,100		Colton	55%	44%	$3,352
Widen Mount Vernon grade separation in Colton on the Alhambra Line	$3,700		Colton	55%	44%	$725
In Fontana on Citrus Avenue At Santa Fe Railroad Construct Undercrossing For Existing 4 Lanes	$16,000		Fontana	55%	33%	$2,379
Grade Separation at Main St in Grand Terrace on the San Bernardino Line	$18,100		G. Terr.	55%	40%	$3,253
In Hesperia on Ranchero Road 7Th Avenue To Danbury Realign Road And Construct Railroad Undercrossing	$16,140	($4,000)	Hesperia	55%	59%	$3,219
Grade Separation at Eucalyptus Rd in Hesperia on the BNSF Line	$12,000		Hesperia	55%	59%	$3,182
Grade Separation at Beaumont Av in Loma Linda on the Yuma Line	$16,300		L. Linda	55%	39%	$2,848
Grade Separation at Monte Vista Av in Montclair at the UPRR Crossing	$15,200	($1,600)	Montclair	55%	19%	$1,158
Widen Central Av grade separation in Montclair on the Alhambra and Los Angeles Lines	$3,100		Montclair	55%	19%	$264
Grade Separation at Archibald Av in Ontario on the Los Angeles Line	$21,000		Ontario	55%	44%	$4,194
Grade Separation at Milliken Av in Ontario on the Alhambra Line	$36,000		Ontario	55%	44%	$7,190
Grade Separation at Milliken Av in Ontario on the Los Angeles Line	$16,000		Ontario	55%	44%	$3,196
Grade Separation at Vineyard Av in Ontario on the Alhambra Line	$17,800		Ontario	55%	44%	$3,555
Grade Separation at Haven Av in Rancho Cucamonga at Metrolink Crossing	$15,910		Rancho	55%	29%	$2,054
Railroad crossing safety improvements at San Timoteo Rd in Redlands on the Yuma Line	$1,300		Redlands	55%	23%	$135
Grade Separation at Palm Av in San Bernardino on the Cajon Line	$18,000		S. Bern.	55%	29%	$2,349
Grade Separation at Rialto Av in San Bernardino on the San Bernardino Line	$17,100		S. Bern.	55%	29%	$2,232
Grade Separation at State/University Pkwy in San Bernardino on the Cajon Line	$16,400	($1,600)	S. Bern.	55%	29%	$1,931
Grade Separation at Valley Bl in Colton on the San Bernardino Line	$19,000		Colton	55%	44%	$3,724
Grade Separation at Hunts Ln in San Bern./Colton on the Yuma Line	$14,000	($5,000)	S. Bern./Colton	55%	36%	$1,469
Grade Separation at Glen Helen Pkwy in San Bernardino Co. on Cajon Line	$25,000		County	55%	33%	$3,713

Table 7. Summary of Fair Share Costs for Arterial, Interchange, and RR Grade Crossing Project Costs for Cities (through year 2030)

Jurisdiction	Ratio of Trip Growth to 2030 Trips	Total Art. Cost ($Mill)	Devel. Share Of Total Art. Cost ($Mill)	Devel. Share Of Interchg Cost ($Mill)	Devel. Share Of RR Grade Sep. Cost ($Mill)	Devel. Share of Total Cost ($Mill)
Adelanto	81%	$89.42	$74.34	$6.88	$0.00	$81.22
Apple Valley	41%	$140.39	$59.01	$22.99	$0.00	$82.00
Chino	51%	$93.23	$48.56	$21.54	$0.00	$70.10
Chino Hills	14%	$20.77	$2.92	$0.00	$0.00	$2.92
Colton	44%	$36.48	$16.29	$12.31	$8.01	$36.61
Fontana	33%	$182.94	$61.95	$43.06	$2.38	$107.39
Grand Terrace	40%	$18.89	$7.73	$0.00	$3.25	$10.98
Hesperia	59%	$142.65	$86.16	$44.22	$6.40	$136.78
Highland	46%	$96.18	$45.76	$14.20	$0.00	$59.96
Loma Linda	39%	$54.41	$21.66	$23.84	$2.85	$48.35
Montclair	19%	$6.02	$1.17	$4.12	$1.42	$6.71
Ontario	44%	$180.24	$82.00	$51.46	$18.14	$151.59
Rancho Cucamonga	29%	$60.04	$17.66	$19.80	$2.05	$39.51
Redlands	23%	$58.22	$13.79	$8.52	$0.14	$22.45
Rialto	40%	$67.91	$28.17	$13.18	$0.00	$41.35
San Bernardino	29%	$94.69	$28.15	$46.69	$14.12	$88.96
Upland	39%	$20.22	$8.17	$2.00	$0.00	$10.17
Victorville	49%	$82.93	$41.68	$45.79	$0.00	$87.47
Yucaipa	31%	$88.29	$27.96	$16.53	$0.00	$44.49
Total	42%	$1,801.00	$779.35	$479.26	$62.48	$1,321.08

Table 8. Summary of Fair Share Costs for Arterial, Interchange, and RR Grade Crossing Project Costs for Sphere Areas (through 2030)

JURISDICTION	Ratio of Trip Growth to 2030 Trips	Total Art. Cost ($Mill)	Devel. Share Of Total Art. Cost ($Mill)	Devel. Share Of Interchg Cost ($Mill)	Devel. Share Of RR Grade Sep. Cost ($Mill)	Devel. Share of Total Cost ($Mill)
Adelanto Sphere	63%	$1.93	$1.24	$0.00	$0.00	$1.24
Apple Valley Sphere	40%	$13.77	$5.69	$8.32	$0.00	$14.01
Chino Sphere	37%	$21.40	$8.04	$1.21	$0.00	$9.25
Colton Sphere	37%	$6.53	$2.49	$0.20	$0.00	$2.69
Fontana Sphere	37%	$61.34	$23.30	$29.84	$0.00	$53.14
Hesperia Sphere	42%	$19.12	$8.14	$0.75	$0.00	$8.89
Loma Linda Sphere	72%	$0.70	$0.52	$4.67	$0.00	$5.19
Montclair Sphere	37%	$12.78	$4.79	$2.27	$0.00	$7.06
Redlands Sphere	36%	$18.40	$6.70	$6.58	$0.00	$13.28
Rialto Sphere	38%	$30.63	$12.07	$11.35	$0.00	$23.42
San Bernardino Sphere	23%	$10.03	$2.38	$4.25	$0.00	$6.63
Upland Sphere	39%	$12.60	$5.00	$1.17	$0.00	$6.17
Victorville Sphere	18%	$23.75	$4.32	$0.40	$0.00	$4.72
Yucaipa Sphere	40%	$1.40	$0.57	$0.00	$0.00	$0.57
SBCo Non-Sphere	62%	$14.63	$9.32	$0.00	$3.71	$13.04
SBCo Donut Hole	62%	$18.10	$11.50	$11.12	$0.00	$22.62
Total	39%	$267.08	$106.07	$82.13	$3.71	$191.91

Several special circumstances need to be noted. First, Ontario International Airport, which is expected to undergo a major expansion through year 2030, will develop its own mitigation program in conjunction with the City of Ontario. Los Angeles World Airports (LAWA) is preparing an Environmental Impact Report and associated Traffic Impact Analysis report for its updated master plan. That TIA, to be prepared in accordance with CMP guidelines, will provide the basis for mitigation of traffic impacts in the vicinity of the airport. This will result in an agreement between the City of Ontario and LAWA governing the transportation improvements that will be funded as part of the airport expansion. These commitments may be considered a part of the City of Ontario's development mitigation program, subject to the provisions of Chapter 4 and Appendix J of the CMP. Transportation impact mitigation committed to outside the City of Ontario may be considered part of the development mitigation program for the appropriate jurisdiction. Mitigation for San Bernardino International Airport/IVDA and for Southern California Logistics Airport may be handled in the same way.